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**The Clash of Independent Wills:  
How Effective is Brigade Doctrine for Meeting  
Engagements?**

**A Monograph  
by  
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Infantry**



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### ABSTRACT

THE CLASH OF INDEPENDENT WILLS: HOW EFFECTIVE IS  
BRIGADE DOCTRINE FOR MEETING ENGAGEMENTS? by MAJ John  
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This monograph concerns the adequacy of heavy  
brigade doctrine for meeting engagements.  
Specifically, it discusses how well FM 71-3, Armored  
and Mechanized Infantry Brigade, provides guidance for  
the preparation for and conduct of meeting engagements.  
Army doctrine tends to regard meeting engagements as  
the result of mistakes and avoidable. This monograph  
concludes that this view is misguided and has a  
negative effect on heavy brigade doctrine.

This monograph examines the theories that pertain  
to the nature of meeting engagements. Theorists  
include Clausewitz, Simpkín, Fuller, Sun Tzu, and  
Tukhachevskiy, as well as several other Soviet  
theoreticians less well known in the west. With this  
theoretical base, the monograph examines historical  
examples from both World War II and the Yom Kippur War  
to determine whether the theory is supported by  
experience. Finally, the monograph analyses FM 71-3  
using criteria established in FM 100-5, Operations.  
These criteria are: seize the initiative early; develop  
the situation and initiate maneuver rapidly; attack  
violently and resolutely; and maintain momentum by  
synchronizing the actions of combat, combat support,  
and combat service support elements.

This monograph concludes that U.S. Army doctrine  
in general and FM 71-3 in particular provide  
insufficient guidance for meeting engagements. This  
stems from a failure to adequately establish the  
context wherein meeting engagements take place. This  
problem is exacerbated by a negative stigma attached to  
meeting engagements that is passed down to FM 71-3 from  
higher level manuals. To be effective, FM 71-3 must  
recognize meeting engagements as opportunities to seize  
the initiative. Further, the manual must provide the  
particulars necessary to guide a unit's preparation and  
conduct of meeting engagements.

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## I. Introduction

The U.S. Army's doctrinal vision of future warfare fully lives up to Carl von Clausewitz's concepts of fog, friction, uncertainty, and chance; victory belongs to the side that can seize and retain the initiative.<sup>1</sup> This chaotic battlefield and the struggle for initiative serve as the catalysts for meeting engagements--the ultimate clash of independent wills.

The Soviets write extensively about the conduct of meeting engagements. At the height of the Cold War, they pinned their hopes for victory on success in the initial period of war. Rapid movement with little telltale mobilization would allow the Soviets to meet the NATO forces before they could occupy defensive positions. Soviet theorists felt this would gain them the initiative and forestall NATO's employment of nuclear weapons.<sup>2</sup> Recent troop reductions and the end of the Cold War changed all that. Or did it?

James Schneider, military theorist at the School of Advanced Military Studies (SAMS), postulates that the initial period of future wars will be dominated by meeting engagements. These will occur because armies cannot continuously cover a front; the result will be gaps and numerous nonlinear actions.<sup>3</sup> The Soviet Army recognizes these same characteristics in future warfare, reaching similar conclusions about the

likelihood of meeting engagements. For them, meeting engagements will be as important as ever.<sup>4</sup>

These thoughts raise questions about the U.S. Army's preparedness to fight meeting engagements. Observations from the Combat Training Centers (CTC) indicate we are not prepared, and trainers at the CTCs identify poor doctrine as part of the reason.<sup>5</sup> The purpose of this study is to determine how much of this problem can be attributed to doctrine, with emphasis on the heavy brigade heavy brigade. The primary research question is: How well does FM 71-3, Armored and Mechanized Infantry Brigade, provide guidance for the preparation for and conduct of meeting engagements?

Why FM 71-3? It is the primary source of doctrine for the U.S. Army's heavy brigades. It is responsible for providing guidance to the brigade's leadership based on current thinking about the employment of heavy brigades "... in relation to its higher headquarters, its subordinate units, and the threat array."<sup>6</sup> The manual addresses the synchronization of all the assets normally assigned, attached, or in support of the brigade. Its function as doctrine is to provide a vision of contemporary and future war; reduce friction through a common understanding of how to fight; and provide a basis for training, education, materiel development, and force design.<sup>7</sup>

I chose to focus on the heavy brigade because it is the first tactical echelon that normally operates with elements of all the battlefield systems. It is somewhat self contained, and the Army is considering it as the basis for maneuver in the AirLand Battle-Future operational concept.

Before I answer the basic research question, I will establish the theoretical basis for meeting engagements by introducing several theorists whose thoughts contribute to our understanding of these engagements. Next, I will provide historical examples of meeting engagements at the lower tactical level. These examples will reinforce our understanding of the theory, and demonstrate how practitioners have applied the concepts. This knowledge of theory and history provide the background for analyzing the contents of FM 71-3 to determine whether its guidance for meeting engagements is adequate.

The analysis of FM 71-3 will answer the basic research question. The principle tool for my analysis will be criteria provided in FM 100-5, Operations. The criteria for a successful meeting engagement are:

- 1) Seize the initiative early.
- 2) Develop the situation and initiate maneuver rapidly.
- 3) Attack violently and resolutely.



- 4) Maintain momentum by synchronizing the actions of combat, combat support, and combat service support elements."

These criteria are the instruments of measurement by which I will examine the contents of FM 71-3. The evidence that results from this examination will provide the basis for conclusions and implications.

A definition of a meeting engagement is a prerequisite for this study. FM 100-5 defines it as a chance encounter, frequently the result of ineffective reconnaissance at brigade and higher levels. Meeting engagements may be conducted by design when two forces attack to "... obtain positional advantage, gain a decisive terrain feature, or assert moral dominance." The last part of this definition is significant, considering the doctrine's emphasis on gaining and maintaining the initiative through offensive action.

FM 101-5-1, Operational Terms and Symbols, defines meeting engagement as: "A combat action that occurs when a moving force, incompletely deployed for battle, engages an enemy at an unexpected time and place. The enemy force may be either stationary or in motion." Unlike FM 100-5, this definition does not provide for a meeting engagement that is conducted on purpose. It conveys the impression of a friendly force that is surprised or caught in a compromising situation.

The Soviet Army's definition for the meeting engagement is more precise. They limit the definition to encounters where both sides are attempting to gain their objective through offensive action. In Soviet manuals, the meeting engagement continues until one side is destroyed or relinquishes his offensive aim and attempts to defend or withdraw. At that point, the winner conducts an attack or pursuit.' ' The Soviets view meeting engagements opportunistically; a way to seize the initiative in a fluid environment.

Since my analysis is of U.S. Army doctrine, I will use the definitions upon which this doctrine is predicated. However, we must retain the notion of a meeting engagement by design, as discussed in FM 100-5. For our purposes, a meeting engagement is an encounter wherein one or both of the participants are attempting to achieve their aims by offensive action. It may be a chance encounter or occur as the result of purposeful actions to gain the initiative by offensive action.

## II. Theory

The principal theoretical issue underlying meeting engagements is that initiative is the first determinant of victory. Carl von Clausewitz spoke to this principal when he defined the offensive as the form of warfare with the positive aim; only the offensive can bring about a decision. At best, the defender can only stave off a decision; to impose his will he must revert to the offensive.<sup>12</sup>

In modern times, after mechanization restored mobility to the battlefield, the struggle for initiative dominated the writings of many theorists. The Russian theorist, Mikhail Tukhachevskiy, discussed success on the battlefield not only in terms of control of ones own forces, but in terms of controlling the enemy by the nature of your actions.<sup>13</sup> FM 100-5 follows Tukhachevskiy's line of thought and defines initiative as "... setting or changing the terms of battle by action."<sup>14</sup> At the same time, AirLand Battle doctrine identifies offensive action, even in the defense, as the key to seizing the initiative. The essence of the meeting engagement is the struggle for initiative.<sup>15</sup>

The classic meeting engagement of two offensive forces colliding is also an environment characterized by great dynamism and speed. The dynamic interaction of forces and their speed of execution place a premium

on decisive action taken early. Soviet theorists stress the often decisive importance of striking the first blow.<sup>16</sup> This creates the psychological effect of surprise and serves to paralyze the opponent. In a fight for time, space, and initiative, even a temporary hesitation can be catastrophic.<sup>17</sup>

Conflicting with the requirement for speed is the need for adequate information for a decision. Gathering information, relaying it to the decision maker, then allowing for his analysis and decision, consumes precious time. The modern theorist, Richard Simpkin, writes that a lack of information directly affects the tempo of decisions and actions. Units caught in this situation do not move with as much purpose, but slowly feel their way through the battle.<sup>18</sup> Soviet theorists believe that a commander who is overly concerned about restoring certainty and control to the engagement, will revert to the defense. The commander will do this to slow down the action and regain certainty about the location and actions of his own forces, if nothing else. By doing this, he surrenders the key to victory--the initiative.<sup>19</sup>

While uncertainty is a part of all combat, the dynamism and rapidity of a meeting engagement magnify its effects. The time needed for gathering and processing information into action works directly against the need for rapid and decisive action. This

results in a battle for information that begins before and continues throughout the engagement.<sup>20</sup> In the end, this tension can only be resolved by a commander's willingness to act resolutely, despite uncertainty.<sup>21</sup>

Given the will to act, the force must have the agility to respond. There is no time to reorganize and issue detailed instructions; the force must be organized to fight directly from the move. According to J. F. C. Fuller, "Distribution is the plan in bud, action is plan in full bloom."<sup>22</sup> The march organization reflects the plan, allowing the force to rapidly move into the engagement without reorganization.

This agility is also key to maintaining the momentum of the attack to prevent the enemy from recovering. The force accomplishes this through the cooperation of all arms to enhance its own momentum while degrading the enemy's. The synchronization of combined arms offsets the weakness of any one arm.<sup>23</sup> Richard Simpkin equates momentum to mass and velocity and says, while there must be a balance, velocity is the more important of the two, but only important in relation to the enemy. To gain a relative advantage, degrade the enemy's mobility in relation to your own mobility. This is accomplished by "holding" or fixing the enemy both physically and psychologically.<sup>24</sup>

Several theorists have written about the need to fix the enemy. Sun Tzu discussed this in the context

of normal and extraordinary forces. The role of the normal force was to engage and fix the enemy; the role of the extraordinary, to win. Important to this discussion is the notion, forwarded by one of the commentators, that the forces may switch roles as necessary to ensure the main effort attacks weakness.<sup>25</sup>

Tukhachevskiy recognized this need and wrote about "nailing the enemy down." By this he meant that you must take away the enemy's freedom of action in order to retain your own. In his discussions of deep operations, he extended this through the enemy's entire depth by the use of fires, air insertions, and the psychological shock of mechanized forces attacking to the depths of the enemy's formation.<sup>26</sup> Simpkin contributes further to understanding the psychological aspects of fixing the enemy in his discussion of the natural attraction of forces upon contact. This attraction results in a frontal fixation for the enemy which facilitates the mobile force's efforts to envelop and destroy the enemy.<sup>27</sup>

Combat support and combat service support forces also contribute to the maintenance of momentum. Combat support elements gather timely information on the enemy; deny him the same advantage; and protect the combat forces from enemy obstacles, air, and counter-envelopments. Combat service support forces ensure the force is supplied and maintained to fight at its best.

Simpkin makes the point that as long as the force has potential mobility (velocity via sufficient fuel and maintenance) and firepower (mass via sufficient ammunition and replacement), it exerts pressure on the enemy.<sup>28</sup>

Do these theories hold true for the future? Most theorists agree with the notion of an increasingly empty battlefield where forces are widely dispersed. This would seem to increase the occurrence of meeting engagements.<sup>29</sup>

The U.S. Army's Concepts and Doctrine Directorate, located at Ft. Leavenworth, believes that future intelligence technology will play a dominant role on this battlefield. This technology will provide "near-perfect" intelligence, allowing units to avoid meeting engagements. If an enemy force is attacking toward a moving friendly force, the friendly force will be able to detect the enemy, occupy favorable terrain, and ambush the enemy.<sup>30</sup>

Other theorists do not ascribe to the idea that improved technology will eliminate meeting engagements. Their rationale, apart from any lack of faith in the absolute reliability of future technologies, is still based on the meeting engagement as a way of seizing the initiative. In the example cited above, they would say this might be appropriate if you are already in possession of the favorable terrain, the terrain could

not be bypassed, or you did not have a positive goal. Otherwise, stopping only cedes the initiative to the enemy.

Some theorists take a somewhat more pragmatic (some might say cynical) approach. They believe the root contributor to chance encounters is human failings and that adversaries quickly discover countermeasures to offset technological advantages.<sup>31</sup> Clausewitz warned that the reliability of intelligence is captive to the frailties of human nature.<sup>32</sup> This will be true as long as man is a participant in war.

Having reviewed the theory pertaining to the meeting engagement, we can now deduce several key points. Seizing and retaining the initiative is vital to success in a meeting engagement. This is accomplished through offensive action beginning with the initial contact. Additionally, gaining fire superiority early, fixing the enemy, and attacking the enemy throughout his depth, limit the enemy's options and help to set the terms of battle. Lastly, all these things done quickly and with surprise contribute towards gaining the psychological initiative. FM 100-5 has summarized these into "Seize the initiative early."

You must aggressively seek information on the enemy and terrain while denying him the same benefit. Despite incomplete information, you must be willing to maneuver rapidly and attack aggressively or risk losing



the initiative. This requires a speed of action that demands attacking from the march with little, if any, reorganization and few changes in plan. FM 100-5 has divided these points into two criteria: "Develop the situation and maneuver rapidly" and "Attack violently and resolutely."

Once you decide to attack, you must maintain the momentum to prevent the enemy's recovery. Combined arms cooperation (the combined effects of combat, CS, and CSS elements) facilitates this maintenance of momentum. These points are contained in FM 100-5's criteria "Attack violently and resolutely" and "Maintain momentum by synchronizing the actions of combat, combat support, and combat service support elements."

These are the theories that attempt to explain the phenomena of meeting engagements. With this discussion as a basis, we can examine historical examples to see how soldiers have applied these concepts in combat.

### III. Historical Perspective

I have selected four historical examples that demonstrate various aspects of the theory we have just discussed. Three examples are from the Second World War and the fourth, from the 1973 Yom Kippur War. I kept my examples at the lower tactical level so we could better relate these experiences to our analysis of modern heavy brigade doctrine. Because they are usually the remembrances of one man, they tend not to be comprehensive, and are undoubtedly biased. However, they do give us an idea of what was important to the observer, and insights to the nature of meeting engagements.

#### BORISOVKA<sup>30</sup>

In March 1943, four months before the battle of Kursk, the Germans began an offensive that penetrated the Russian defenses in an attempt to link-up with defending German forces in the vicinity of Belgorod. The Russian 19th Guards Tank Brigade, III Guards Tank Corps, was in reserve and given the order to counterattack the penetration.

A. V. Yegorov, commander of the tank brigade, anticipated a meeting engagement, organized his forces accordingly, and issued instructions for the engagement prior to departing his assembly area. He led with reconnaissance and an advanced guard composed of a motorized rifle battalion (MRB) reinforced with a tank

company and an artillery antitank battery. His remaining three tank battalions comprised the main body, followed by his rear services. They marched through the night of 15 March and into contact with the Germans at dawn on the 16th.

The lead MRB made contact with an enemy motorized rifle regiment reinforced with tanks and supported by close air support. The battalion immediately deployed and engaged the enemy's tanks. Yegorov came forward to the lead battalion's position and issued instructions for an artillery preparation, a fixing attack by the MRB, and an envelopment of the enemy's tanks by two of his tank battalions. The third tank battalion was held in the second echelon.

Following the artillery preparation, the MRB assaulted the enemy's forward positions while the first echelon tank battalions used the terrain to maneuver to the enemy's flank. Reconnaissance forces reported a reinforcing enemy tank unit moving forward, and Yegorov ordered his second echelon to defeat the enemy reinforcements on the march.<sup>34</sup>

During the assault, one of the first echelon tank battalions started to fall behind, while the second tank battalion reported that it had reached an intermediate objective. Yegorov's decision about where he was most needed sheds light on the importance of maintaining momentum:

Frontline experience convinced me that even an insignificant success could be quickly exploited if decisive measures were promptly taken. This is why, instead of [going to the battalion that had fallen behind], I headed off to the Chuvarov battalion where things had swung to our favor.<sup>345</sup>

In the end, having confronted an enemy division, being outnumbered 60 tanks to 20, and facing the German Panther Tank for the first time, the brigade was forced to assume the defensive and await reinforcements. Even in the defense, the brigade resorted to ambushes and counterattacks to force the enemy to focus on them. Their efforts allowed the Russians to stop the penetration and prevent the encirclement.

In this example, we can see the importance of organizing the force for a meeting engagement as soon as one is anticipated. The brigade moved rapidly from the march to the assault with little changes to the original plan. The lead MRB's rapid assault seized the initiative from the Germans long enough for the brigade commander to assess the situation and issue instructions for the attack. These actions are typical of the lessons the Soviets learned from World War II meeting engagements, as reflected in the book, Tanks and Tank Troops:

Beating the adversary in detection, delivery of fire, deployment and attack was decidedly the most important condition for achieving success in a meeting engagement. That side which beat the adversary in deploying and mounting an attack would achieve victory even over a numerically superior adversary.<sup>346</sup>

The Soviet commander's plan included a fixing attack from the front, while two battalions enveloped the enemy from the flank. Reconnaissance assets looked deep to identify enemy reinforcements and provided time for the second echelon tank battalion to prevent the enemy's interference with the momentum of the main attack. Air defense elements also assisted in maintaining the momentum by fending off German close air support. Finally, the commander was always where he could watch the situation develop, influence success, and maintain momentum. Even when the meeting engagement failed, the brigade used offensive actions (ambushes and counterattacks) to force the enemy to fix on them and develop the situation for the next higher echelon.

#### SEDAN<sup>37</sup>

During the Germans' Ardennes offensive in 1940, the French struggled to bring a counterattack to bear against the flank of the advancing German units. Finally, the French 3d Armored Division was brought up from the south and committed to disrupt the German attack. The French moved north from the village of Le Chesne to Stonne, south of Sedan. At the same time a German panzer division was moving south on two axes.

German reconnaissance identified the French division and the German commander decided to attack. French reconnaissance only identified one of the German

columns and the French commander decided to attempt to bypass the Germans by crossing to the west bank of the Bar River and the Canal des Ardennes. The meeting engagement occurred as the French attempted the crossing with the Germans defeating them in a three hour, hard fought engagement.

This example demonstrates the need to fix the enemy force: the French commander decided to bypass a known enemy force without hindering its momentum. This ceded the initiative to the Germans, who retained freedom of maneuver. The example also shows the importance of developing the situation throughout the enemy's depth: French reconnaissance was not deep enough to identify the second German column, allowing the French division to be surprised.

#### VILLERS-BOCAGE<sup>20</sup>

In the review of theory, I mentioned the psychological aspects of seizing the initiative. Most writers talk about this in terms of surprise. During Operation Goodwood, the British attempt to break out of their bridgeheads in Normandy, a British column was surprised in a meeting engagement and was forced to withdraw.

Elements of the British 7th Armored Division moved through the village of Villers-Bocage with limited security forward. First Lieutenant Michael Wittmann, commander of the German 2d Company, 501st

Heavy SS Tank Battalion and already a hero of the Eastern front, identified the enemy column and alerted his company. As the remainder of his unit attempted to prepare for action, his single tank moved to the flank of the British column and destroyed the lead vehicle, blocking the road. Wittmann then raced the length of the column spraying the British half-tracks with machinegun fire and firing his main gun at the tanks.

His actions resulted in 14 half-tracks, 19 tanks, and 14 Bren Gun Carriers damaged and destroyed. More importantly, he seized the initiative, fixed the enemy force (both physically and psychologically), and forced the larger British unit to withdraw. The lack of British reconnaissance forward allowed them to be surprised. I included this example, because it conveys the effects of a violent and resolute attack in a meeting engagement.

#### TEL SHAAR<sup>29</sup>

After halting the Syrian offensive in the Golan Heights in the October 1973 Yom Kippur War, the Israelis launched a counteroffensive aimed at placing the Syrian capitol, Damascus, within artillery range. This would force the Syrians to ask for a cease-fire and an end to the war in the north.

The main effort of the counteroffensive was MG Dan Laner's 240th Armored Division,<sup>40</sup> with approximately 170 Sherman and Centurion Tanks. After

several days of hard fighting along the Quneitra-Damascus Road, the division penetrated the Syrian defenses, and was in pursuit of fleeing Syrian forces. The Syrians launched a counterattack toward the Israeli's eastern flank to stop the offensive and destroy the Israeli division. The counterattack force was the newly arrived Iraqi 12th Armored Brigade, with approximately 200 T-54/55 tanks. The Iraqi commander, with no recent intelligence, no maps, and no radio frequencies, organized his force into two combined arms columns and a small reserve. After receiving a towed artillery battalion, he began his movement toward the Israeli flank.

MG Laner, on a piece of highground overwatching his division's pursuit, observed dust clouds approaching his flank, and Israeli reconnaissance units identified the enemy tanks. He issued orders to form an "open box" defense oriented to the east and prepared for the Iraqi attack. In effect, the division formed a large ambush with the intent of counterattacking from the unengaged flank, once the Iraqis committed themselves.

The 12th Armored Brigade, with no other intelligence and no reconnaissance forward, oriented on Tel Shaar, the ground that commanded the Quneitra-Damascus Road. As they approached the highground, the northern column came into contact with the Israeli



northern flank and began to assault, with artillery and close air support. After losing 17 tanks, the northern column withdrew. The southern column began engaging the Israeli center and continued the attack into the night. With many losses from the close-in fighting, the Iraqis attempted to withdraw using the cover of artillery fire, but could not, because the radio frequencies were jammed by the Israelis.

Throughout the night, the Iraqis attempted to attack one or the other side of the Israeli position, only to receive counterattacks into the flank. At dawn the Iraqis concentrated in the north again. MG Laner counterattacked with a brigade from the south, but an Iraqi flank guard stopped the attack with antitank fires. A deeper Israeli attempt at envelopment around the northern flank met with Iraqi reserves moving toward the engagement. In the end, the Iraqi counterattack seized the initiative from the Israelis, halting their pursuit, and allowing time for the Syrians to reestablish their defenses.

This engagement demonstrates several points about modern meeting engagements. At the brigade level, this engagement was a series of meeting engagements, many of them at night. While they were acting as part of a larger unit's defense, they spent the entire engagement in mobile clashes with the enemy. The combined arms organization of both sides afforded them significant

flexibility. It allowed the Israeli brigades to either defend or attack, depending on where the Iraqis attacked, and it allowed the Iraqis to assault with combined arms while protecting their flank with antitank weapons.

The engagement also gives an example of a force assuming defensive positions, as opposed to meeting the enemy in the open. The situation allowed this, because the Israelis were near the key terrain at the beginning of the engagement and the Iraqis did not have good reconnaissance forward. Early in the engagement, the Israelis were able to fix the Iraqis with their defenses and counterattack with unengaged forces; the Iraqis failed to fix the Israelis. The second morning, however, the Iraqis protected their flank with antitank forces, allowing them to maintain the momentum of their attack.

These historical examples illustrate the context in which meeting engagements may occur and provide insights as to what was important to successful execution. In doing this, they also serve to validate the criteria I will now use to analyze FM 71-3.

#### IV. Analysis of FM 71-3

FM 71-3 does not use the term meeting engagement. Since meeting engagements are described in the capstone doctrine, why were they left out of the heavy brigade manual? The answer lies in the perspective our Army has on these engagements and can best be understood when compared to the Soviet perspective.

The Soviets write volumes on this topic with a complete section on meeting engagements in virtually every manual. They define it as a separate type of offensive operation.<sup>41</sup> Our manuals define it as a combat action, and discuss it only sparingly. These different perspectives lead to different conclusions about the value of meeting engagements. The Soviets see them as inevitable and desirable--in fact, an opportunity. We see them as a mistake and avoidable, despite a professed offensive mindset. (These perspectives appear to be the result of different historical experiences. For a more complete explanation of this, see Appendix A).

FM 100-5's discussion of meeting engagements falls between movement to contact and hasty attack, implying that meeting engagements are a state of transition between the two. FM 71-3 discusses movement to contact and hasty attacks, but the implication of a transition between the two, is lost. FM 71-3's discussion of hasty attacks includes a one sentence

paragraph with guidance for attacking a moving enemy.<sup>42</sup> This is where my analysis was centered.

I have divided the analysis under the headings of the FM 100-5 criteria, allowing me to identify FM 71-3's specific strengths and weaknesses for this subject. We must remember, however, that these criteria are interdependent and not intended to stand alone; there will be some overlap as I take you through the analysis.

#### SEIZE THE INITIATIVE EARLY

FM 71-3 is explicit from the beginning; initiative means setting the terms of battle and the brigade commander imposes his will on the enemy through offensive action. Offensive action, even in the defense, is the primary means of gaining the initiative.<sup>43</sup> Theory and history suggest four key aspects of initiative: the importance of winning the initial contact, interdicting enemy forces in depth, gaining the fire initiative (early fire superiority), and gaining the psychological initiative.

The brigade begins setting the terms of battle at first contact by fixing the enemy to the front in preparation for an envelopment. FM 71-3 discusses the importance of a fixing attack in two places. In the discussion of envelopment as a form of maneuver, the text stresses the importance of a fixing attack of battalion size. The second discussion is in the

paragraph concerning attacking a moving enemy: "The initial advantage in hasty attacks belongs to the force that first fixes and contains the enemy . . . ."44 The initial contact must be aimed at seizing the initiative. What guidance does the manual provide to organize forces to accomplish this?

FM 71-3 provides guidance for organization in its description of the brigade column formation. The column formation ". . . facilitates retention of the initiative and permits flexibility because the following battalion TFs [task forces] are in position to move through or around the leading elements to maintain the momentum of the attack." Figure 1 is FM 71-3's depiction of a brigade column formation.

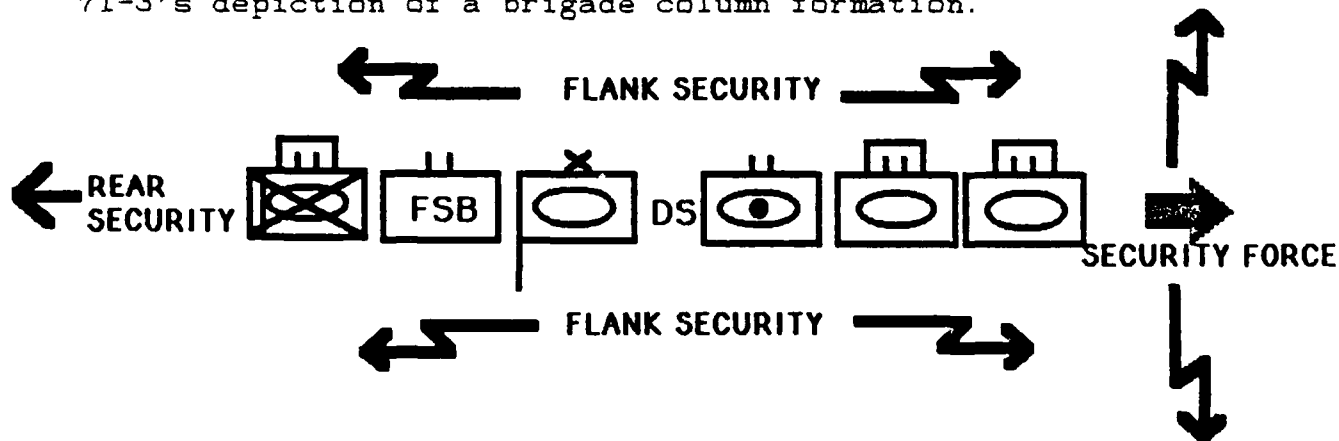


Figure 1. Brigade Column Formation.<sup>45</sup>

The movement to contact section provides guidance on the composition and responsibilities of the forward security force. In divisional brigades, the lead TF(s) provide the security force and its size and composition

are determined by an analysis of mission, enemy, terrain, troops, and terrain (METT-T). The cavalry troop is the security force in a separate brigade. The forward security force has responsibility for reconnaissance, developing the situation, destroying enemy reconnaissance, securing key terrain, reporting obstacles and breaching them within its means, and preventing interference with the main body's deployment.<sup>46</sup>

To do this, the manual depicts a company team reinforced with engineers.<sup>47</sup> The Soviets organize their advanced guard around a battalion reinforced by a company of tanks, engineers, and up to a battalion of artillery (see Figure 2).<sup>48</sup>

If a head-on meeting engagement took place between a U.S. brigade and a Soviet regiment, the U.S. brigade could be at a disadvantage from several perspectives. First, isolating on the security fight, where the initial contact will take place, the U.S. company will meet a reinforced battalion. This will probably force the U.S. brigade to commit its lead battalion, thereby committing the main body very early in the engagement. Second, the spacing of the security force may not give the brigade time and space to maneuver, causing it to become fixed by the enemy's security forces (see Figure 2).<sup>49</sup>

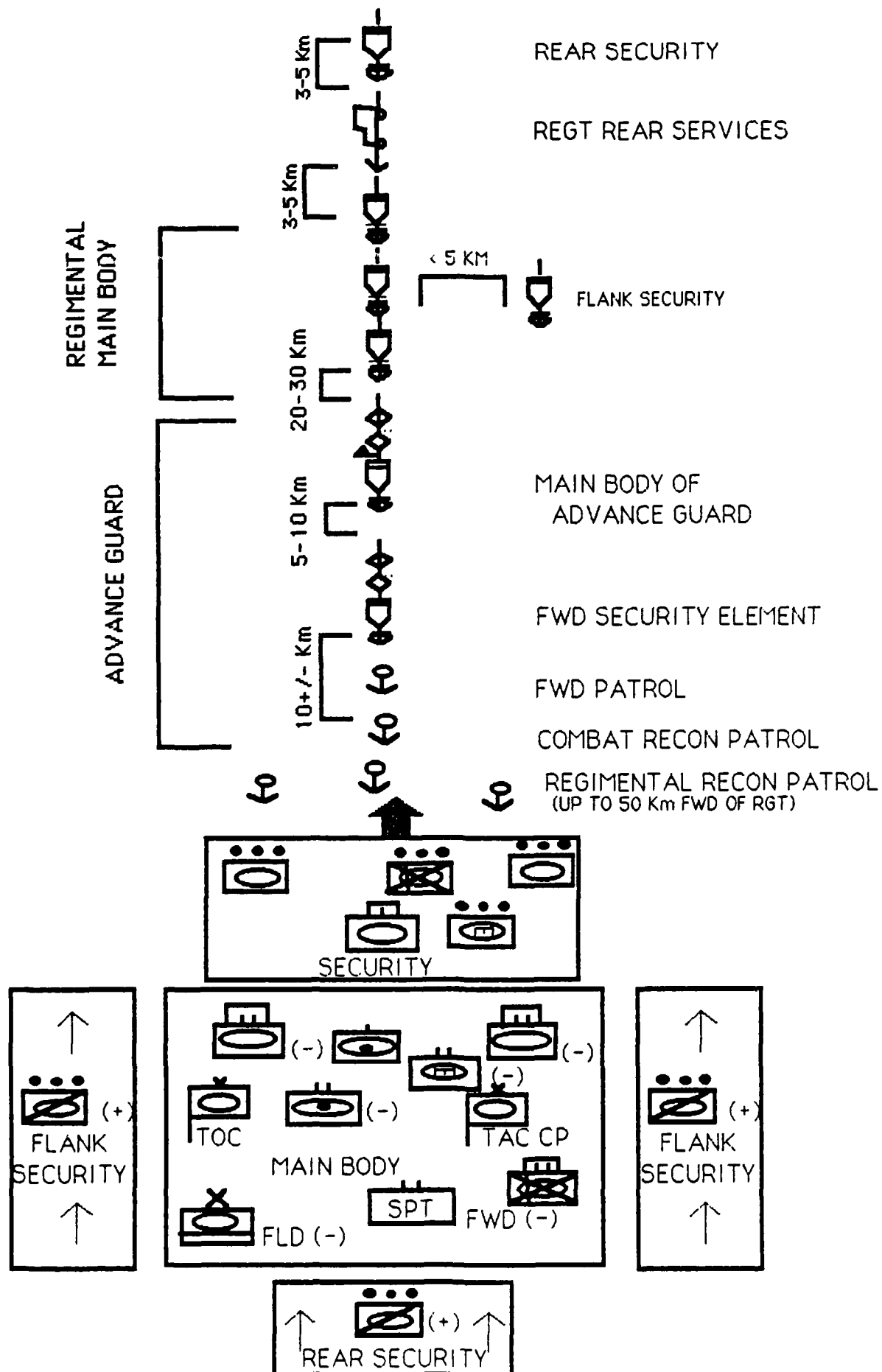


Figure 2. U.S. Brigade Movement to Contact and a Soviet Motorized Rifle Regiment March Formation.<sup>50</sup>

Fires play a significant role in seizing the initiative both during initial contact and in suppression of the enemy's forces in depth. FM 71-3 discusses the use of air assets and deep fires to help isolate enemy forces, interdict their maneuver, and destroy key assets in depth (artillery, command posts, and logistics units).<sup>51</sup> The capability of indirect fires to support this is largely dependent on their location.

FM 71-3's portrayal of artillery positioning is confusing. Figure 2 shows the brigade's direct support (DS) artillery battalion behind the lead battalions of the brigade and a battery forward with the lead battalions. The text states that the DS artillery is behind the second battalion in order of march, with a battery behind the lead battalions.<sup>52</sup> This a problem when we consider the space that a battalion occupies on the ground and the difficulty that artillery would have trying to move forward through this formation to occupy firing positions and support the security forces.<sup>53</sup>

The Soviets place up to a battalion of artillery in support of the advance guard with one battery forward with the Forward Security Element (FSE). This places artillery in position to fire sooner, therefore a better chance of gaining fire superiority. Brigade Observer/Controllers (O/C) from the National Training Center (NTC) observed that artillery is frequently a



problem for the brigades during meeting engagements. The artillery is frequently not integrated into the march organization and not in a position to fire once security forces make contact. Artillery units are often forced to move forward at the critical period of initial contact.<sup>54</sup>

Both the effects of initial contact and fire superiority contribute to the psychological aspects of seizing the initiative. The only psychological aspect mentioned is a reference to the value of surprise at the beginning of FM 71-3's offense chapter. There are discussions about the requirement for speed and fixing forces during an envelopment, but no guidance for how to achieve surprise. Likewise, there is no warning about the dangers of frontal fixation; a phenomenon that could exacerbate the security force problem, discussed earlier.

In summary, FM 71-3 does emphasize the need to seize the initiative early. It discusses the importance of fixing forces, responsive fire support, and depth fires as ways of limiting the enemy's options. The manual provides little guidance for how to achieve these things. Specifically, the size, composition, and spatial relationships of the forward security force are poorly conceived. Also, positioning of indirect fire assets is confusing and, potentially too far to the

rear. Finally, the manual does not provide guidance on the psychological aspects of a meeting engagement.

#### DEVELOP THE SITUATION AND INITIATE MANEUVER RAPIDLY

Reconnaissance is the key to developing the situation. Reconnaissance must provide information about the enemy and terrain throughout the depth of his formation and the area of operations, as early as possible. As necessary, combat forces fight to provide this information. While doing this, we must also deny the enemy the same information about our forces.

FM 71-3 makes the forward security force responsible for reconnaissance. The reconnaissance effort is focused on "... enemy locations, obstacles, and areas of possible NBC [nuclear, biological, and chemical] contamination . . . ." in addition to the condition of the terrain. Under the section on movement to contact, the manual points out that long range surveillance assets may locate the enemy prior to physical contact. It also states that the forward security element must operate far enough forward to allow the commander sufficient reaction time.

How is the security force organized to do this? FM 71-3 falls back on METT-T, but depicts one approach (see Figure 2): a forward security force of a tank company team with an attached engineer platoon. There are no scouts attached to the force; they are all providing flank or rear security. This means that

the first reconnaissance of the enemy with ground means will be when a tank or mechanized infantry platoon observes the enemy at an unspecified distance forward of the main body.<sup>56</sup>

With the forward security force responsible for both reconnaissance and security, the reconnaissance effort becomes clustered around the point of contact. This is often a problem with reconnaissance during meeting engagements at the NTC. While the brigades usually include the lead battalion's scout platoon in the security force (as is stipulated in FM 71-2), its focus is frequently fixed on the first force it contacts. This allows the opposing forces (OPFOR) wide latitude and often the element of surprise, since no one is observing their movements in depth.<sup>57</sup> In its discussion of exploitation, FM 71-3 implies that tactical air reconnaissance and Army aircraft may keep the commander informed as to the enemy's activities in depth; however, these assets are not always available and do not have the staying capability of ground assets.

Another important method of obtaining information is through combat. The German Army included the concept of "battle reconnaissance" in their 1933 version of Truppenfuhrung (Troop Leading). Battle reconnaissance refers to combat actions taken to clarify the situation and gain information about the

enemy. The Soviets have adopted the concept and depend on the forward security forces to not only protect the deployment of the main body, but to fight for information by forcing the enemy to deploy, revealing his strength and location.<sup>59</sup> FM 71-3 tasks the forward security force with developing the situation. This has often been used as a euphemism for engaging the enemy to force him to reveal his hand. The manual reinforces this by describing the brigade's reconnaissance efforts as aggressive. Finally, in the section on exploitation, the manual discusses attacking from column and tasks the lead elements with conducting reconnaissance to develop the situation.<sup>60</sup>

The way FM 71-3 handles counterreconnaissance also affects the lack of reconnaissance in depth. The manual gives this task to the forward security force; another reason why their focus will be on the enemy's lead elements and not his depth. Soviet doctrine identifies a clear division of labor. They expect their regimental reconnaissance company to operate up to 50 Km forward of the regiment. Even the CRP's responsibility for counterreconnaissance is limited to self protection and targets of opportunity. Their mission is to find the enemy main body. The FSE and following security forces have the mission to destroy enemy reconnaissance.<sup>60</sup>

This problem might be easier to handle if U.S. brigades had organic reconnaissance. The Army Division 86 reorganization originally included a brigade scout platoon; it was cut due to manpower constraints. This has been resurrected in the proposed ALB-F brigade organization. While this would have helped, it does not explain the doctrinal problems related here. The requirements for reconnaissance in the enemy's depth while denying him the same, still exist and must be addressed.<sup>51</sup>

All of this effort to gather information is designed to allow the commander to initiate maneuver rapidly. This is achieved by anticipating the meeting engagement and incorporating considerations for it into a plan prior to moving. FM 71-3 discusses the Army's Intelligence Preparation of the Battlefield (IPB) as a way of predicting the enemy's actions. Elsewhere, the manual stresses the commander's need to forecast or think ahead into the coming fight. While prediction goes well beyond anticipation, both of these thoughts are concerned with thinking ahead and thinking about how the enemy will fight you. FM 71-3 also discusses the need for contingency plans that allow you to act faster when a particular situation arises.<sup>52</sup>

Before we can anticipate potential events on the battlefield, we must be able to visualize the nature of the fight in the first place. The manual does not

convey the context in which meeting engagements will take place, thereby preventing a commander from gaining the full benefit of the nuances of IPB and the value of contingency planning. The commander must know that meeting engagements are likely to occur in the initial stages of combat and when attacking forces penetrate defenses and meet counterattacking reserves. This is the knowledge that allows the commander to anticipate.

Even if the commander can anticipate the enemy's actions and the ground on which the engagement will occur, he must still be able to act quickly once the engagement develops. FM 71-3 mentions standard operating procedures (SOP) as one way of speeding up execution; however, the discussion is limited to reporting procedures and does not include actions on contact.

In summary, FM 71-3 recognizes the need to develop the situation, but provides poor guidance on how it should be accomplished. The methods depicted and discussed focus the reconnaissance effort at the point of contact. FM 71-3 also discusses some methods to assist a commander in initiating maneuver rapidly, based on the situation. Most of the value is lost, however, because the manual does not discuss the context in which meeting engagements occur.

## ATTACK VIOLENTLY AND RESOLUTELY

The criterion to develop the situation and initiate maneuver rapidly is closely related to the requirement to attack violently and resolutely. FM 71-3 does not discuss violence of action nor resoluteness in the face of uncertainty. At the beginning of the offense chapter brigade commanders are told they must be audacious and capable of taking advantage of fleeting windows of opportunity; however, these points are never reiterated in the discussion of movement to contact or hasty attack.

The manual must convey the commander's requirement to be decisive, even in the absence of complete information. This is probably the manual's greatest failing with regard to the FM 100-5 criteria, and it stems from the lack of an overall appreciation of the nature of meeting engagements. With no guidance on how to achieve a violent and resolute attack, the unit is apt to be too cautious or to be committed in a foolhardy way. O/Cs have observed both these situations at the NTC. If too cautious, commanders surrender the initiative; if foolhardy, they drive into the OPFOR's engagement areas.<sup>54</sup> The correct balance is to act resolutely, while protecting the unit from surprises that will disrupt the momentum of the attack.

MAINTAIN MOMENTUM BY SYNCHRONIZING THE ACTIONS  
OF COMBAT, COMBAT SUPPORT, AND COMBAT  
SERVICE SUPPORT ELEMENTS

We have already seen how seizing the initiative is related to gaining momentum. Once gained, however, the commander must ensure the enemy does not recover. Combat forces must maintain pressure on the enemy and continually present him with situations he cannot counter. FM 71-3 stresses the need for aggressive follow-up and states that pressure on the enemy denies him relief from fighting and denies him the ability to regain the initiative. The manual lists reserves as a way to sustain this pressure.<sup>55</sup> In addition to reinforcing success to maintain momentum, we have to protect the attacking force from enemy countermeasures. This task falls largely to the combat support elements.

Air defense prevents interdiction from the air. FM 71-3's discussion is good, noting the air defense responsibilities of all units, and that air defense units should occupy selected sites along the route of march and integrate into the moving columns. Maneuver battalions receive priority of short range air defense (SHORAD) systems during the assault.<sup>56</sup>

The commander also preserves the momentum by preventing ground interdiction. Soviet doctrine lists mobile obstacle teams, movement support detachments, antitank forces, and reserves as possible forces to protect the flank and thus the momentum of the attack.



FM 71-3 tasks the engineers to protect flanks ". . . by creating obstacles on avenues of approach" and lists family of scatterable mines (FASCAM) as a way of fixing enemy counterattack forces and closing their lines of retreat.<sup>67</sup> The manual does not address responsibility for covering these obstacles by fire.

There is also little guidance on NBC support. There is a discussion on the use of smoke to isolate, screen, or deceive the enemy, but no guidance on NBC reconnaissance except that the brigade operations officer must task units to perform it. (This task would undoubtedly go to the forward security force.) Discussions on decontamination and offensive use of chemicals are generic and provide no guidance for the peculiarities of their use in the offense, much less a meeting engagement.<sup>68</sup>

The remaining CS elements mentioned are signal and military police. Signal units help maintain momentum by establishing retransmission sites and leap-frogging multichannel assets to retain connectivity with higher headquarters. Military police units conduct battlefield circulation control (BCC), area security, or enemy prisoner of war handling. This guidance is helpful but apt to be missed, if the commander does not already understand the overall context of meeting engagements.<sup>69</sup>

FM 71-3 states that the purpose of combat service support (CSS) is to assist the maintenance of momentum. The offense chapter specifies that priority classes of supply should be moved by bounds to maintain continuous support and still stay out of the way of the maneuver. The CSS chapter describes the use of push packages of fuel, ammunition, water, decontamination materials, and Mission Oriented Protective Posture (MOPP) equipment to support offensive operations. It also lists increased casualties, use of captured enemy materials (fuel, ammunition), and planning for CSS communications, among others, as considerations for support of offensive operations.<sup>70</sup> All this is effective guidance for the maintenance of momentum for a meeting engagement.

While the manual includes some good considerations for the individual roles that combat, CS, and CSS elements must play to maintain the momentum of an offensive operation, there is practically nothing on how these efforts are synchronized. There is a synchronization matrix of sorts in the offense chapter, but the entries simply reiterate vague doctrinal generalities such as "priority to main effort" and say nothing about how the various systems interact.<sup>71</sup> The example used would be hard to adapt to a meeting engagement, as it depicts the attack of a defending enemy (only one enemy unit is depicted on the accompanying sketch and it is a headquarters unit).

Now that I have dissected FM 71-3 to determine its strengths and weaknesses, I will synthesize these disparate parts into some basic conclusions. The conclusions will form the basis for implications for how future brigade doctrine might be improved and point to some broader implications for the way the U.S. Army thinks about warfare.

## V. Conclusions

FM 71-3's root problem lies in the perceptions handed down from higher level doctrinal manuals. These manuals view meeting engagements as avoidable and a mistake as opposed to inevitable and an opportunity. This is reflected in FM 71-3's lack of specific guidance for meeting engagements. Aside from one paragraph, the manual assumes that if we are attacking, the enemy is defending; if we are defending, the enemy is attacking. This type guidance does not suffice for the dynamic clash of two offensively oriented opponents.

The criteria for successful meeting engagements, established in FM 100-5, are addressed only indirectly, if at all. The doctrine does not envision meeting engagements as unique actions. These engagements are only variants of hasty attacks. With this said, the manual does contain some useful guidance. To successfully glean this guidance, however, the commander must have a considerable knowledge of theory, history, and other armies' doctrines. Otherwise, the nuances are too subtle to be pieced together.

The Combat Training Centers tell us our units seldom win meeting engagements during training, and Observer/Controllers suggest that part of the problem lies with Army doctrine. This was the catalyst for my primary research question: How well does FM 71-3

provide guidance for the preparation for and conduct of meeting engagements? This study shows that too many of the significant pieces are missing, and those that are there, lack context. In the end, the guidance is insufficient.

## VI. Implications

The implications that flow from the conclusions stated above concern current and future U.S. Army doctrine in general and FM 71-3 in particular. Our doctrinal treatment of meeting engagements must be revised, and the proper tone must be set in FM 100-5, the capstone doctrinal manual. FM 100-5 must establish the context in which meeting engagements occur and the doctrinal criteria for success. Chief among the revisions must be a clearer definition of meeting engagement, unfettered with references to chance contacts with stationary forces and the implication that meeting engagements only happen when things have gone wrong. It must address their inevitability and identify them as potential opportunities to seize the initiative.

With this tone set in the capstone manual, FM 71-3 must specifically address meeting engagements and provide guidance for how a heavy brigade satisfies the established criteria. The manual must convey the considerations for the use of time and space, including

guidelines for determining how far reconnaissance and security elements should operate forward of the brigade, and describing a division of labor between the two. The size and composition of forward security forces must be adjusted to allow this division of labor and to prevent the main body from becoming decisively engaged before the situation is sufficiently developed.

FM 71-3 must address the moral domain. The moral domain permeates, perhaps even dominates, meeting engagements. The manual must address the psychological aspects of surprise, resoluteness, and initiative. The counter to psychological upsets may be found in combined arms cooperation. For this, the manual must convey the roles that each combat, CS, and CSS element plays in the engagement and how they must interact.

These implications suggest the need for a level of detail that is currently absent from our manuals. This detail has been the subject of debate among the Army's leadership and doctrine writers for some time. One side of the debate argues that too much detail will result in a prescriptive doctrine that will inhibit problem solving based on the situation at hand and be perceived as binding.

The other side of the argument is that the detail is just a point of departure for problem solving and allows the commander to concentrate on how these details will be applied. The proper solution to this

would seem to be to provide the commander with the best thought on the subject at that time (via the manuals) and trust him to adapt to the circumstances of his situation. This is a timely argument because the Army is in the process of developing its future doctrine.<sup>72</sup>

The Army's proposed doctrine for the future is called AirLand Battle-Future. The non-linear, empty battlefield that this doctrine envisions will be fertile ground for meeting engagements. To retain the initiative, any new doctrine must look upon the meeting engagement as an opportunity to impose our will on the enemy.

While FM 71-3 falls short in providing guidance for executing meeting engagements, we can fix it. The solution can begin now with the revision of FM 100-5 and with the proper emphasis in future doctrine. The remainder of the solution will follow as we revise the subordinate manuals including FM 71-3. These changes will help us realize the full potential of our current offensive doctrine and help prepare our heavy brigades to dominate future mechanized battlefields.

## Appendix A. A Different Outlook on History

While studying the history of meeting engagements I quickly discovered a void in western literature concerning meeting engagements. The historical void (in relation to the prolific Soviets) seems to result from differing historical perspectives. I will examine the differences in perspective by presenting a general overview of the history of the modern meeting engagement.

The historical genesis of the modern meeting engagement coincided with mechanization in a nonlinear environment. Mechanization allowed armies to proceed from mobilization to combat with little or no halt. Nonlinear battlefields provided greater space, open flanks, and resulted in greater movement--in short, a more dynamic environment where the situation changed quickly and initiative was all important.<sup>73</sup>

This environment existed even during the First World War. On the Eastern front, largely due to the vast spaces involved, the Russians and Germans collided in meeting engagements as each vied for the initiative. Experiences on the Western front, however, were dominated by linear and static trench warfare.

The Russian experiences with nonlinearity continued during their civil war. It was largely a war



of movement wherein meeting engagements were a frequent form of combat. From these experiences came the Soviet deep operations theorists. They foresaw future warfare being dominated by maneuver, with meeting engagements taking place in every phase of the battle.<sup>74</sup> Meeting engagements would occur during the beginning of war as armies fought for the initial advantage, and once the armies aligned themselves on the battlefield, they would occur as penetrating offensive forces met counterattacking reserves.<sup>75</sup> The Soviets reflected this vision of warfare in their writings, while much of the west prepared for another World War I.

There were maneuver theorists in the west, as well. Writers such as Liddell Hart, J. F. C. Fuller, Heinz Guderian, and others, also foresaw the effect of mechanization on the battlefield and the meeting engagements that would result. Even so, the German Army, who had shared the Eastern front experiences and supposedly embraced the views of these theorists, had many higher ranking officers who were slow to recognize the implications of this type of warfare.<sup>76</sup> In France, England, and the United States, these theorists carried even less weight.

In World War II, Soviet and American experiences were very different, again. The Soviets fought great mobile battles against the Germans' strength; meeting engagements were part of almost every battle.

Americans fought on the more restricted, linear battlefields of Italy, Normandy, and Western Germany. Even during the mobile war that followed the breakout from Normandy, Americans fought against a retreating enemy with little capacity for mobile counterstrikes. We have not associated the nonlinear aspects of our experiences (island warfare with Japan or any of our numerous low intensity experiences) with mechanized meeting engagements.

In modern experience, the Soviets have seen their only hope for victory tied to surprise attacks and catching NATO forces in meeting engagements before they could reach their defensive positions. The U.S. has seen its only hope for a conventional victory tied to quickly occupying and strongly preparing forward defenses while waiting for reinforcements.

Two British authors summarized western attitudes about meeting engagements. Charles Dick, a Soviet specialist, wrote, " [Meeting engagements], as far as the British Army is concerned, is a lunatic idea. You either attack someone who is defending or defend against someone who is attacking."<sup>77</sup> Richard Simpkin wrote that, in many minds, getting involved in a meeting engagement is like ". . . being caught with your trousers down."<sup>78</sup> These attitudes may go a long way toward explaining some of the problems we see in the analysis our doctrine, as well.

These thoughts on the differences between U.S. and Soviet historical perspectives concerning meeting engagements are not definitive. Such a dissertation is beyond the scope of this paper. However, it may help to explain why there is such a difference in the Soviet's and our own treatment of meeting engagements in historical literature. The results of these different perspectives, are that the Soviets see meeting engagements as not only inevitable and an opportunity, but desirable. We see them as a mistake and avoidable. These attitudes seem to be reflected in FM 71-3.

## Appendix B. Soviet Meeting Engagement Example

During my research for this paper, LTC Lester Grau, a senior analyst with the Soviet Army Studies Office (SASO) at Ft. Leavenworth, gave me a sample Soviet-style plan for a motorized rifle division (MRD) anticipating a meeting engagement. It was the result of an overall effort by SASO to translate the lecture notes of an Afghan officer who had attended the Soviet Voroshilov General Staff Academy. These notes are being incorporated into a series of books which will eventually cover the spectrum from Strategy to tactics. This sample comes from the volume on tactics which is not yet published. The purpose of this appendix is twofold: analysis will show how the Soviets might approach solving the meeting engagement dilemma, and it will show that the Soviets are not as locked into templates as we may lead ourselves to believe. I will discuss the layout of the product, interpret the plan, and then analyze it in terms of the FM 100-5 criteria.

The layout of the product allows a lot of information to be conveyed on one piece of paper. The plan (Figure 3) shows the distance in kilometers across the top (this plan encompasses over 160 Km), depicts the organization of three march columns, depicts a sketch of the plan, and provides a timing matrix for units crossing the start line. The original document also contained three separate decision support

templates: one for the base plan and two for likely contingencies. These will be included with the plan when the book is published.

The MRD plans to march with three regiments abreast: the tank regiment (TR) in the north, the division artillery regiment in the center, and a motorized rifle regiment (MRR) in the south. The remaining two MRRs follow in column in the center. The commander plans for a reinforced motorized rifle battalion to operate as an advanced detachment (forward detachment) to seize a key choke point (mountain pass) ahead of the main body.

Each column has security forces forward of the main body. The TR in the north, because he is led by the division advance detachment, has only a tank company as forward security. In the center, the division has placed an advanced guard forward of the division command post and artillery regiment, made up of the division's separate tank battalion reinforced with a motorized rifle company and an artillery battalion. The regiment in the south has a tank battalion reinforced with an artillery battalion forward of its main body as its advanced guard. The entire division is preceded by the division and regimental reconnaissance units, and there are no specified flank or rear guards depicted.

Figure 3. Soviet MRD Plan for a Meeting Engagement

Combat support units are also incorporated into the plan. The division placed a mobile antitank reserve between the advanced guards and the main bodies on both the center and the southern axes. Each of these is supported by a mobile obstacle detachment (POZ in Russian). As discussed above, each of the forward units are reinforced with artillery, and the division artillery group (built around the division artillery regiment (-)) is moving with the division lead elements. The plan is not in sufficient detail to determine the locations of air defense or electronic warfare units. Combat support units are in the rear, with the division rear services in the southern column. With this basic understanding of the organization of forces, we can analyze the plan.

The advanced detachment will depart the assembly area early. It is to seize a chokepoint at a mountain pass to prevent the enemy's movement in the north. This will force the enemy to the south, and set the terms for the subsequent meeting engagement. The antitank reserves and mobile obstacle detachments are in a position to emplace hasty obstacles in front of the enemy and support the deployment of the southern regiment. Their purpose is to fix the enemy with obstacles and antitank fires. Forcing the enemy south and fixing them there, enables the division's main attack to envelop the enemy with a secured shoulder

form the north. How would this stack-up against FM 100-5's criteria for successful meeting engagements?

The first criterion is to seize the initiative early. The division commander is attempting to do this by seizing key terrain before the enemy can, forcing the enemy to move south, then fixing the enemy in the south. The use of the advanced detachment is key to anticipating the enemy and setting the terms for the engagement early.

Two other aspects of seizing the initiative are fires and surprise. The division has artillery well forward in all the formations, including leading with the division artillery regiment in the center column of the main body. This will allow the division to mass artillery fires as soon as it makes contact. Fires are also planned to influence the movement of forces in the enemy's depth. The "SU" targets are indications of planned air strikes. The commander also plans to seize the psychological initiative using a surprise envelopment form the north, after fixing the enemy in the south.

Develop the situation and initiate maneuver rapidly. The division plan places reconnaissance units well forward and places large security forces forward to determine the enemy's actions, fight for information, and protect the deployment of the main body, as necessary. The forces are large enough to



gain the necessary information and provide time for the division commander to adjust his plan, if necessary, and rapidly attack from the march.

It is difficult to determine whether the plan will be violently and resolutely executed based on what appears on paper. The only thing that can be discerned from this plan is that it shapes the fight in the way that may allow the division to achieve surprise and access to a weakness--the enemy flank.

The last criterion is to maintain momentum by synchronizing the actions of combat, combat support, and combat service support elements. In this plan both combat and combat support units protect the flanks of the main effort, ensuring its continued momentum. Artillery is well forward to support the main effort and strike targets in depth. Finally, combat service support elements (rear services) are pictured as traveling with the units to provide timely support.

In all, this is a well thought out and integrated plan. The only weaknesses appear to be the lack of flank and rear guards. It could be, in the context of whatever scenario this was conceived, that they were not necessary. Another possibility, is that the commander took a risk in those areas based on his concept. As a product of a Soviet trained officer, it certainly is not just a template applied to terrain. It shows considerable thought, an understanding of

concepts, and a willingness to adapt to a given situation. The question for us is whether we can beat this kind of an enemy, armed with the U.S. Army meeting engagement doctrine.

## ENDNOTES

<sup>1</sup>U. S. Army Field Manual 100-5, Operations. (Washington D.C.: U.S. Government Printing Office, 5 May 1986), 14.

<sup>2</sup>P. H. Vigor, Soviet Blitzkrieg Theory. (New York: St. Martin's Press, 1983), 202.

<sup>3</sup>James J. Schneider, "Theoretical Implications of Operational Art," Military Review, September 1990, 21.

<sup>4</sup>Lester W. Grau, "Soviet Non-Linear Combat: The Challenge of the 90's," (U.S. Army Combined Arms Center, Soviet Army Studies Office, September 1990), 13, 28, and 29; and interview by author with LTC Grau, 12 October 1990.

<sup>5</sup>Carl Ernst, COL (P), Director of the Battle Command Training Program (BCTP), made these points during a Commanding General/Assistant Division Commander's Course "BCTP Lessons Learned" briefing, September 1990; and LTC Andy Peterson, former Senior Brigade Trainer at the National Training Center, telephone interview by author, 12 October 1990.

<sup>6</sup>U.S. Army Field Manual 71-3, Armored and Mechanized Infantry Brigade. (Washington D.C.: U.S. Government Printing Office, 11 May 1988), 11.

<sup>7</sup>Harold R. Winton, "Memorandum for Record, Subject: Thoughts on Military Doctrine," School of Advanced Military Studies course issue, 30 October 1989.

<sup>8</sup>FM 100-5, 115.

<sup>9</sup>FM 100-5, 115.

<sup>10</sup>U. S. Army Field Manual 101-5-1, Operational Terms and Symbols. (Washington D.C.: U.S. Government Printing Office, 21 October 1985), 1-46; This is also the basic definition that appears in Joint Pub 1-02, Department of Defense Dictionary of Military and Associated Terms (1 Dec. 1989): "A combat action that occurs when a moving force, incompletely deployed for battle, engages an enemy at an unexpected time and place." This publication indicates this is also the NATO definition.

<sup>11</sup>V. G. Reznichenko, Taktika [Tactics]. (1987), 117 and 132. Translated by JPRS, 29 June 1988; and N. V. Ogarkov, ed., Voyenny Entsiklopedicheskiy Slovar [Military Encyclopedic Dictionary]. (14 January 1983).

Translated in JPRS U. S. S. R. Report: Military Affairs Military Encyclopedic Dictionary. (8 January 1985), 649. Meeting Engagement: "Actions by subunits (units, combined units) in which both sides seek to accomplish their missions by offensive actions. It may occur: when encountering the enemy while on the move; in an offensive operation -- when repelling counterattacks and counterthrusts, during actions against airborne and amphibious assaults. A meeting engagement is characterized by: swift closing by the opposing forces and engagement without a halt in attack position; by intense combat effort to seize and hold the initiative; by development of combat actions along a wide frontage; by inadequate clarity of the combat situation, by frequent and abrupt situation changes; by limited time available to organize for combat operations. Following are the most important conditions for success in a meeting engagement: continuous reconnaissance; prompt and timely decision-making and swift communication of missions to the combat troops; advance establishment of the requisite force grouping of men and weapons; beating the adversary in delivering fire, in deployment and launching of the assault phase by the main forces, and delivery of attacks into flanks and rear of the enemy's main force grouping. A meeting engagement may develop into an encounter battle."

A last note; the Soviets separate these engagements by level of war. A meeting battle is at the tactical level; a meeting engagement (encounter battle) is at the operational level. This explains the last sentence of the translation, above.

<sup>12</sup>Carl von Clausewitz, On War, ed. and trans. by Michael Howard and Peter Paret (Princeton: Princeton University Press, 1984), 387 and 530.

<sup>13</sup>Mikhail Tukhachevskiy, "New Problems in Warfare," 1931, 23. School of Advanced Military Studies reprint of selected chapters of an unpublished manuscript, reprinted by the U.S. Army War College's Art of War Colloquium, 1 November 1983.

<sup>14</sup>FM 100-5, 15.

<sup>15</sup>Reznichenko, 119.

<sup>16</sup>A. Kh. Babadzhanian, ed., Tanks and Tank Troops, (14 March 1980), 246. Translated by JPRS 29 April 1981.

<sup>17</sup>A. Zheltoukhov, "The Meeting Engagement," Voyennyy Vestnik [Military Herald], 1984, 302. Translated by U.S. Army Foreign Science and Technology Center; and Reznichenko, 121.

<sup>19</sup>Richard E. Simpkin, Race to the Swift. (London: Brassey's Defence Publishers, (1985), 112.

<sup>20</sup>Jacob Kipp, analyst, Soviet Army Studies Office, interview by the author, 29 September, 1990.

<sup>21</sup>J. F. C. Fuller, Armored Warfare: An Annotated Edition of Lectures on F.S.R. III (Operations Between Mechanized Forces). (Connecticut: Greenwood Press, 1943), 58 and 65; R. G. Simonyan and S. V. Grishin, Tactical Reconnaissance. (Moscow: Military Publishing House of Ministry of Defense of the U.S.S.R., 1980), 93. Translated by Directorate of Soviet Affairs, Department of the Air Force; and Babadzhanyan, 245.

<sup>22</sup>Reznichenko, 121; Zheltoukhov, 302.

<sup>23</sup>L. Korzun, "Meeting Engagement Tactics: Postwar Developments Discussed." Voyenno-Istoricheskiy Zhurnal [Military History Journal], No. 1 (January 1982). Translated and reprinted in Reference Book 20-19, Selected Readings in Military History: Soviet Military History: Volume II, The Soviet Army Since 1945. (Ft. Leavenworth: Command and General Staff College, January 1984), 270; and Fuller, 51.

<sup>24</sup>Fuller, 72; and Reznichenko, 118 and 120.

<sup>25</sup>Richard E. Simpkin, Red Armour: An Examination of the Soviet Mobile Force Concept. (London: Brassey's Defence Publishers, 1984), 180; and Simpkin, Race, 97 and 101-106.

<sup>26</sup>Sun Tzu, The Art of War, trans. Samuel Griffith (Oxford: Oxford University Press, 1963), 91.

<sup>27</sup>Tukhachevskiy, 7.

<sup>28</sup>Simpkin, Race, 97.

<sup>29</sup>Simpkin, Race, 113-114.

<sup>30</sup>Schneider, 25-27; and Grau, 28.

<sup>31</sup>Stephen J. Kempf, COL, Director of Concepts and Doctrine, Command and General Staff College, Ft. Leavenworth, Kansas, in answer to a question posed by the author during a lecture on the AirLand Battle-Future operational concept, 2 September 1990.

<sup>32</sup>Martin van Creveld, Command in War. (Cambridge: Howard University Press, 1985), 265 and 231; Chris Bellamy, The Future of Land Warfare. (New York: St.

Martin's Press, 1987), 261-262 and 265; and Simpkin, Race, 179.

<sup>32</sup>Clausewitz, 117; MAJ Robin Swann suggested this theoretical connection during his review of a rough draft of this paper.

<sup>33</sup>A. V. Yegorov, "Meeting Engagement at Borisovka," Voyenno-Istoricheskiy Zhurnal [Military Historical Journal] No. 1, January 1986, 36-41. Translated by JPRS 22 July 1986. MG (ret) Yegorov was the brigade commander, 19th Guards Tank Brigade, during this action. Unless otherwise noted, this example is taken from his recollections.

<sup>34</sup>Yegorov, 36.

<sup>35</sup>Yegorov, 36.

<sup>36</sup>Babadzhanyan, 246.

<sup>37</sup>Guenther Blumentritt, "Instructive Strategic and Tactical Examples Taken from Two World Wars: Part III," Historical Division, Headquarters, U.S. Army, Europe (no date), 2-3. General Guenther von Blumentritt, then the G3 for Army Group A, included these events in his post-war writings. Unless otherwise noted, this example is taken from his recollections.

<sup>38</sup>Charles E. White, "One Tiger," Armor Magazine, July-August 1978, 16-17.

<sup>39</sup>Eshel, David, "Golan war: Part 3," Born in Battle Magazine, unk, 15-31.

<sup>40</sup>Jerry Asher and Eric Hammel, Duel for the Golan: The 100-Hour Battle That Saved Israel. (New York: William Morrow and Co., 1987), Appendix A.

<sup>41</sup>U.S. Army Field Manual 100-2-1, The Soviet Army: Operations and Tactics (Final Draft, Unedited). (Ft. Leavenworth: Combined Arms Center, 18 June 1990), 4-86.

<sup>42</sup>FM 100-5, 112-115; and FM 71-3, 3-18--3-21.

<sup>43</sup>FM 71-3, 1-2, 3-1 and 4-8.

<sup>44</sup>FM 71-3, 3-10 and 3-21.

<sup>45</sup>FM 71-3, 3-15; This is taken from figure 3-5, but reoriented to fit in the text.

<sup>46</sup>FM 71-3, 3-19.

<sup>47</sup>FM 71-3, 3-18--3-19.

<sup>48</sup>Korzun, 269; Zeltoukhov, 303; and FM 100-2-1, 4-21.

<sup>49</sup>U.S. Army Field Manual 71-2, Tank and Mechanized Infantry Battalion Task Force. (Washington D.C.: U.S. Government Printing Office, June 1988), 3-45; and FM 100-2-1, 4-99; The second consideration concerns the location of these forces in time and space. FM 71-3's guidance on the spatial relationships of the security force to the main body is limited to: ". . . security for a moving force must operate far enough from the main body to allow the commander adequate reaction time." FM 71-2 interprets this as 1-2 kilometers forward of the main body. The Soviet advance guard is divided into three separate elements. The lead element, the combat reconnaissance patrol (CRP), is a reinforced platoon; followed at up to 10 Km by a reinforced company, the forward security element (FSE); and followed at from 5-10 Km by the advance guard main body, a reinforced battalion. The regimental main body follows the advance guard at a distance of 20-30 Km.

If these two forces met each other, the U.S. brigade would appear to have the initial advantage. It will meet a platoon with a company; however, as the FSE closes, the U.S. brigade may be forced to commit his lead battalion. As the advance guard main body closes, the U.S. brigade may be forced to commit additional battalions from the line of march. In the process, the enemy has fixed our brigade with his lead battalion, leaving his main body free to maneuver to the flank. Our formation gets a considerable force into the fight early, but does not provide the depth in time and space to prevent a considerable portion from being fixed by the enemy's security forces.

<sup>50</sup>FM 71-3, 3-19; and FM 100-2-1, 4-18; This figure juxtaposes FM 71-3's Figure 3-8 with FM 100-2-1's Figure 4-3. To do this, it was necessary to reorient the 100-2-1 figure. According to the opposing doctrines, these are the formations that would likely meet in an head-on engagement. This figure points out a potential command and control problem. While it is not clear who would control the security force, it is implied that it would be the battalion that it came from. This would seem to create a problem between the security force and the other lead battalion in the main body.

<sup>51</sup>FM 71-3, 3-21.

<sup>52</sup>FM 71-3, 3-20.

<sup>53</sup>Command and General Staff College Student Text 100-3, Battle Book. (Ft. Leavenworth: Center for Army Tactics, 1 June 1989), 2-7; This manual provides planning figures for movement. With a vehicle every 100 meters in a column formation, an average armor task force of 184 vehicles would occupy 18 kilometers on a single route. In given 2 routes, 9 kilometers. If the artillery follows as prescribed, at 18,100 Km range (23,500 Km with RAP) it barely covers the very front of the main body battalions, much less the forward security force.

<sup>54</sup>Peterson; also conversations with MAJ Lee Burns, former Brigade FSCOORD (fire support coordinator) O/C at the NTC.

<sup>55</sup>FM 71-3, 3-20--3-21.

<sup>56</sup>FM 71-2 may again be one indicator of how this guidance is translated. This manual includes the scout platoon with the forward security force (advance guard) and specifies that it operates 2-6 Km (or 6-18 minutes) forward of the security force. At best, with organic ground assets, we will know about the enemy's presence 18 minutes prior to the commitment of the security force, followed closely by the brigade main body. FM 71-2 places the main body 1-2 Km behind the security force.

<sup>57</sup>Peterson.

<sup>58</sup>German Army, Truppenfuhrung: Teil I [Troop Leading: Part I]. (1933), 34-35. Originally translated by the Command and General Staff College, 1936.

<sup>59</sup>FM 71-3 3-19 and 3-25.

<sup>60</sup>FM 100-2-1, 4-93--4-97; and Korzun, 273.

<sup>61</sup>I was a member of the New Organization Training Team for the Division 86 reorganization. The brigade scout platoon was initially part of the organizational changes, but was dropped. The proposed ALB-F brigade organization includes a 30 man, 10 vehicle (HMMWV) scout platoon.

<sup>62</sup>FM 71-3, 1-3, 2-3, and 2-13.

<sup>63</sup>Babadzhanyan, 235; Vigor, 200; and Simpkin, Race, 108.



<sup>64</sup>William H. Janes, COL, Director of the School of Advanced Military Studies. Conversation with author, 16 October 1990; and Peterson.

<sup>65</sup>FM 71-3, 1-2 and 3-3.

<sup>66</sup>FM 71-3, 3-5.

<sup>67</sup>FM 71-3, 3-6 and 3-21.

<sup>68</sup>FM 71-3, 3-6.

<sup>69</sup>FM 71-3, 3-7.

<sup>70</sup>FM 71-3, 3-7 and 7-3.

<sup>71</sup>FM 71-3, 3-8 and 3-9.

<sup>72</sup>COL. Janes suggested that some may object to these types of changes because of the ongoing debate concerning prescription in our doctrine. Some argue that by specifying sizes, compositions, and distances in our manuals, we leave ourselves open to mindless templating. This argument has two basic flaws: its premise is that our leaders can not be trusted to think for themselves, and it assumes that our leaders already have the requisite knowledge to make these decisions. There is also the argument that the tactics, techniques, and procedures will appear in a separate manual.

That manual, FM 71-123, Tactics, Techniques, and Procedures for Combined Arms Heavy Forces (Coordinating Draft). (Ft. Knox: U.S. Army Armor School, April 1990), supposedly contains all the detail one could want. This manual contains a lot of the same problems as FM 71-3. While it does mention meeting engagements, it does nothing to provide more guidance for time/space relationships, the reconnaissance/security division-of-labor problem, or the command and control problems with the forward security force. In short, it is plagued by the same root problem as FM 71-3--poor perspective.

<sup>73</sup>Tukhachevskiy, 23 and 25.

<sup>74</sup>Bruce W. Menning, "The Imperial Russian Legacy, 1878-1917: A Context for the Origins of Soviet Operational Art," AMSP Course 1: Theory of Operational Art, Ft. Leavenworth: Soviet Army Studies Office, 22 March 1990, 16 ; and lecture series "Origins of Soviet Operational Art" given by Dr. Menning to the AMSP class on 10-11 August 1990.

<sup>75</sup>Ogarkov, 649.

<sup>76</sup>Heinz Guderian, Panzer Leader, trans. by Constantine Fitzgibbon, (New York: Ballantine Books, 1957), 13-27.

<sup>77</sup>Charles Dick, "The Meeting Battle," DA PB 30, Red Thrust Star Magazine, April 1990, 5.

<sup>78</sup>Simpkin, Red Armour, 180.

<sup>79</sup>Ghulam Dastagir Wardak, The Voroshilov Papers: Materials from the Soviet General Staff Academy, ed. by Graham Hall Turbiville, Jr., (Washington D.C.: National Defense University Press). This volume is not yet published. LTC Lester Grau and Dr. Turbiville gave me these working papers to assist in my research.

## BIBLIOGRAPHY

### Books

- Asher, Jerry and Eric Hammel. Duel for the Golan: The 100-Hour Battle That Saved Israel. New York: William Morrow and Co., Inc., 1987.
- Babadzhanyan, A. Kh., ed. Tanki I Tankovye Voyska [Tanks and Tank Troops]. Moscow: Voenizdat, 14 March 1980. Translated in Joint Publication Research Service Translation: Tanks and Tank Troops (JPRS L/9697). Washington D.C.: Foreign Broadcast Information Service, 29 April 1981.
- Bellamy, Chris. The Future of Land Warfare. New York: St. Martin's Press, 1987.
- Clausewitz, Carl von. On War. Edited and translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1984.
- Eshel, David. Mid East Wars: The Yom Kippur War. Israel: Eshel-Dramit, LTD., 1978.
- \_\_\_\_\_. Chariots of the Desert: The Story of the Israeli Armored Corps. London: Brassey's Defence Publishers, 1989.
- Fuller, J. F. C. Armored Warfare: An Annotated Edition of Lectures on F.S.R. III (Operations Between Mechanized Forces). Harrisburg: Military Publishing Company, 1943; reprint, Westport: Greenwood Press, 1983.
- Ogarkov, N. V., ed. Voyennyy Entsiklopedicheskiy Slovar [Military Encyclopedic Dictionary]. Moscow: Voenizdat, 1983. Translated in Joint Publication Research Service U. S. S. R. Report; Military Affairs (JPRS-UMA-85-002-L). Washington D.C.: Foreign Information Broadcast Service, 8 January 1985.
- Reznichenko, V. G., ed. Taktika [Tactics]. 2d ed. rev. and suppl. Moscow: Voenizdat, 1987. Translated in Joint Publication Research Service U. S. S. R. Report; Military Affairs (JPRS-UMA-88-008-L-1). Washington D.C.: Foreign Broadcast Information Service, 29 June 1988.

Simonyan, R. G. and S. V. Grishin. Tactical Reconnaissance. Moscow: Military Publishing House of Ministry of Defense of the U.S.S.R., 1980. Translated by the Directorate of Soviet Affairs, Department of the Air Force, 1980.

Simpkin, Richard. Race to the Swift: Thoughts on Twenty-First Century Warfare. London: Brassey's Defence Publishers, 1985.

\_\_\_\_\_. Red Armour: An Examination of the Soviet Mobile Force Concept. Oxford: Brassey's Defence Publishers, 1984.

Sun Tzu. The Art of War. Translated by Samuel B. Griffin. Oxford: Oxford University Press, 1963.

Wardak, Ghulam Dastagir. The Voroshilov Lectures: Materials from the Soviet General Staff Academy. Edited by Graham Hall Turbiville. Washington D.C.: National Defense University Press, 1989. Author's note: For my research, I received materials from the Soviet Army Studies Office (SASO) prepared by COL Wardak, that depict a typical Soviet plan for a motorized rifle division to conduct a meeting battle. These materials will ultimately appear in a, as yet unpublished, volume in this series.

Van Creveld, Martin. Command in War. Cambridge: Howard University Press, 1985.

Vigor, P. H. Soviet Blitzkrieg Theory. New York: St. Martin's Press, 1983.

#### Government Documents

Command and General Staff College. Student Text 100-3, Battle Book. Ft. Leavenworth: Center for Army Tactics, 1 April 1989.

Department of Defense. Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms. Washington D.C.: U.S. Government Printing Office, 1 December 1989.

Department of the Army. Field Manual 71-2, Tank and Infantry Battalion Task Force. Washington D.C.: HQ Department of the Army, June 1988.

\_\_\_\_\_. Field Manual 71-3, Armored and Mechanized Infantry Brigade. Washington D.C.: HQ Department of the Army, 11 May 1988.

\_\_\_\_\_. Field Manual 71-100, Division Operations.  
Washington D.C.: HQ Department of the Army, 16  
June 1990.

\_\_\_\_\_. Field Manual 71-123, Tactics, Techniques, and  
Procedures for the Combined Arms Heavy Force  
(Coordinating Draft). Ft. Knox: U.S. Army Armor  
School, April 1990.

\_\_\_\_\_. Field Manual 100-5, Operations. Washington  
D.C.: HQ Department of the Army, 5 May 1986.

\_\_\_\_\_. Field Manual 101-5-1, Operational Terms and  
Symbols. Washington D.C.: HQ Department of the  
Army, 21 October 1985.

\_\_\_\_\_. Field Manual 100-2-1, The Soviet Army:  
Operations and Tactics (Final Draft, Unedited).  
Washington D.C.: HQ Department of the Army, 18  
June 1990.

\_\_\_\_\_. AirLand Battle Future Alternate Base Case  
Study I. Ft. Leavenworth, Kansas: U.S. Army  
Combined Arms Combat Development Activity, 1990.

German Army, Truppenfuhrung: Teil I [Troop Leading:  
Part II. 1933. Translated by the Command and  
General Staff College. Ft. Leavenworth, Kansas:  
Command and General Staff College, 1936;  
reprinted, Ft. Leavenworth, Kansas: The Center for  
Army Tactics, 30 June 1989.

War Department. Field Manual 100-5, Field Service  
Regulations, Operations. Washington D.C.: HQ The  
War Department, 22 May 1941.

#### Articles

Dick, Charles. "The Meeting Battle." Department of the  
Army Professional Bulletin 30 (Red Thrust  
Star), Ft Irwin, California: 177th Armored  
Brigade, (April 1990): 5-10.

Eshel, David. "The Golan War: Part 3." Born in Battle  
Magazine, No. 16. Koln, West Germany: Hod  
Hasharon, (no date): 15-31.

Ozolek, David. "Winning the Meeting Engagement." Armor:  
The Magazine of Mobile Warfare, Vol. XCVI, No. 1  
Ft. Knox, Kentucky: U.S. Army Armor Center,  
(January-February 1987): 10-15.

Saint, Crosbie E. and John T. Nelson. "Crushing the Soviet Forward Detachment." Military Review, Vol. LXVII, No. 4. Ft. Leavenworth, Kansas: Command and General Staff College, (April 1988): 3-11.

Schneider, James. "Theoretical Implications of Operational Art." Military Review, Vol. LXX, No. 9. Ft. Leavenworth, Kansas: Command and General Staff College, (September 1990): 17-27.

White, Charles. "One Tiger." Armor: The Magazine of Mobile Warfare, Vol. LXXXVII, No. 4. Ft. Knox, Kentucky: U. S. Army Armor Center, (July-August 1978): 16-17.

#### Soviet Articles

Korzun, L., "Meeting Engagement Tactics: Postwar Developments Discussed." Voyenno-Istoricheskiy Zhurnal [Military Historical Journal], No. 1. (January 1982): 68-77. Translated in Reference Book 20-19, Selected readings in Military History: Soviet Military History, Vol. 2, The Soviet Army Since 1945. Ft. Leavenworth, Kansas: Command and General Staff College, (January 1984): 266-274.

Yegorov, A. V., "Meeting Engagement in Borisovka." Voyenno-Istoricheskiy Zhurnal, No. 1 [Military Historical Journal], (January 1986): 36-41. Translated in Joint Publication Research Service: U. S. S. R. Report; Military Affairs Military History Journal (JPRS-UMA-86-041). Washington D.C.: Foreign Broadcast Information Service, (22 July 1986): 34-42.

Zheloukhov, A., "The Meeting Engagement." Voyenny Vestnik [Military Herald], No. 8. Moscow: Moscow Publishing House, (1984): 15-18. Translated by U.S. Foreign Science and Technology Center. Charlottesville, Virginia: U.S. Foreign Science and Technology Center, (May-June 1985): 302.

#### Other

Blumentritt, Guenther, "Instructive Strategic and Tactical Examples Taken from Two World Wars: Part III." HQ U.S. Army Europe, Historical Division, Reference number MS B-306, (no date): 2-3.

Burns, Lee, MAJ, USA, former Fire Support Coordinator Trainer, National Training Center. Interview by author, 16 October 1990. Author's notes. Ft. Leavenworth, Kansas.

Concannon, John F., "The Soviet Concept of the Meeting Engagement." Student Research Report, U.S. Army Institute for Advanced Russian and East European Studies, Garmish, Germany, April 1976.

Crowley, James C., "NTC Observations." A Memorandum from LTC Crowley, Branch Chief, NTC Division to COL McDaniel. Ft. Benning, Georgia, 31 August 1984.

Ernst, Carl, COL (P), USA, Director, Battle Command Training Program (BCTP). Briefing on BCTP Lessons Learned presented to the Commanding General/Assistant Division Commander's Course, 10 October 1990. Ft. Leavenworth, Kansas.

Grau, Lester W., "Soviet Non-Linear Combat: The Challenge of the 90's." Ft. Leavenworth, Kansas, Soviet Army Studies Office, U.S. Army Combined Arms Center, September 1990.

\_\_\_\_\_. Senior Soviet Analyst, Soviet Army Studies Office. Interview by author, 12 October 1990. Author's notes. Ft. Leavenworth, Kansas.

Janes, William H., COL, USA, Director, School of Advanced Military Studies (SAMS). Interview by author, 16 October 1990. Author's notes. Ft. Leavenworth, Kansas.

Kempf, Stephen J., COL, USA, Director, Concepts and Doctrine, Command and General Staff College. Lecture: "AirLand Battle-Future Concept," 2 September 1990. Author's notes. Ft. Leavenworth, Kansas.

Kipp, Jacob, Ph.D., Soviet Analyst, Soviet Army Studies Office. Interview by author, 29 September 1990. Author's notes. Ft. Leavenworth, Kansas.

Leland, E. S. Jr., BG, USA, "NTC Observations." A Memorandum from Commander, National Training center to LTG Riscassi, 20 November 1985. In author's possession Ft. Irwin, California.

Menning, Bruce W. "The Imperial Russian Legacy, 1878-1917: A Context for the Origins of Soviet Operational Art." Issue materials for Advanced Military Studies Program Course 1: Theory of Operational Art, 22 March 1990.

\_\_\_\_\_. "Origins of Soviet Operational Art." Lecture given to School of Advanced Military Studies, 10-11 August 1990.

Peterson, Andy, LTC, USA, former Senior Brigade Trainer, National Training Center. Telephone interview by author, 12 October 1990. Author's notes. Ft. Leavenworth.

Saint, Crosbie E., LTG, USA, "III Corps Maneuver Booklet." Unpublished guidance to the III Corps, Ft. Hood, Texas, May 1987. School of Advanced Military Studies issue materials.

U.S. Department of the Army, "Operational Report-Lessons Learned, Headquarters, 11th Armored Cavalry Regiment, Period Ending 31 October 1968." Washington D.C.: Office of the Adjutant General, 1969.